STATEMENT OF CONSIDERATIONS

CLASS WAIVER OF THE GOVERNMENT'S U.S. AND FOREIGN PATENT RIGHTS IN INVENTIONS MADE IN THE PERFORMANCE OF COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS ENTERED INTO BY THE ROCKY FLATS PLANT, PURSUANT TO THE DEPARTMENT OF ENERGY/KAISER-HILL MANAGEMENT AND OPERATING CONTRACT NO. DE-AC34-95RF00825 - W(C)95-011.

Kaiser-Hill Company (K-H) manages and operates Rocky Flats Plant for the Department of Energy (DOE) under Prime Contract No. DE-AC34-95RF00825. K-H is organized as a limited liability company.

The Department of Energy (DOE) considers its Government-Owned, Contractor-Operated (GOCOs) facilities, such as Rocky Flats, national resources capable of providing significant contribution to the development of new products and processes, creation of jobs, enhancement of the skill level of the U.S. labor force, and in improved U.S. competitiveness.

Congress, recognizing this unique aspect of GOCO facilities, enacted the National Competitiveness Technology Transfer Act of 1989, hereinafter "Act", (Public Law 101-189). The purpose of this Act was to promote technology transfer between GOCOs and the private sector in the U.S. and to enhance collaboration between universities, the private sector, and the GOCOs in order to foster the development of technologies in areas of significant economic potential.

The Act amended the Stevenson-Wydler Technology Innovation Act of 1980 (Public Law 96-480), as amended, in a number of major aspects. First, the Act extended to GOCOs, upon agency approval, the authority earlier specified in Section 12 of Stevenson-Wydler for Government-Operated Federal Laboratories (GOGOs) to enter into Cooperative Research and Development Agreements (CRADAs) with one or more non-Federal parties (hereinafter "Participant"). Second, the Act required that the GOCOs' operating contracts be modified or that there be a binding agreement to establish technology transfer including CRADAs as a mission for the laboratories and to describe the respective obligations and responsibilities of the agency and the laboratories with respect thereto.

The Act defined a CRADA as:

> Any agreement between one or more Federal laboratories and one or more non-Federal parties under which the Government, through its laboratories, provides personnel, services, facilities, equipment or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the laboratory.

Excluded from this type of agreement are procurement contracts, grants, or cooperative agreements as these terms are used in Sections 6303, 6304, and 6305 of Title 31.

The term "Laboratory" as set forth In the Act includes for purposes of this Class Waiver, any of the facilities that K-H manages and operates under the prime Contract No. DE-AC34-95RF00825 (hereinafter "M&O Contract").

Identified Invention Waiver to K-H

In one particular, the scope of this Class Waiver is directed to the class of identified inventions which comprises subject inventions made by employees of K-H as set out in the M&O Contract (hereinafter "contractor CRADA inventions") in the performance of work under a CRADA that it enters into under the K-H M&O Contract pursuant to the Act.

This waiver is consistent with the objectives and considerations of DOE's waiver regulations. It is believed that the waiver of the Government's rights to K-H in contractor CRADA inventions made in the performance of work under a CRADA will best promote the commercial utilization of such inventions and make the benefits of the cooperative research effort widely available to the public in the shortest practicable time.

Further, the waiver of the Government's rights in such inventions will enable DOE to take advantage of the technology transfer capability of K-H. K-H has assumed an established technology transfer organization at Rocky Flats Plant developed under the authority of the Stevenson-Wydler Technology Innovation Act of 1980 and that organization is fully staffed and functioning.

The waiver to K-H of its CRADA inventions is believed to be further justified in that the performance of the CRADA by K-H and licensing associated therewith will enhance the movement of such waived inventions to the commercial marketplace, especially where K-H inventions will normally be combined with Participants' technology that has commercial value for purposes of commercialization. It is expected that such license arrangements will contain commercialization incentives that will advance the waived inventions to early

commercialization.

Implementation of this Class Waiver to the identified inventions of K-H is to be by a simple procedure which requires:

1. K-H reporting of the invention as required in the K-H M&O Contract; and

2. K-H electing in writing whether or not to retain title to the invention at the time of disclosure or within two years of disclosure, subject to the right of DOE Patent Counsel to proceed with obtaining patent protection where it appears such patent protection might be lost due to a statutory bar.

After review of the invention and relevant facts, Patent Counsel will promptly determine whether the waiver is applicable to the invention.

Class Advance Waiver to Participants' Inventions

In another particular the scope of this Class Waiver is directed to an advance waiver to the Participant of inventions made by employees of, or persons acting on behalf of Participants under the class of CRADAs entered into by Participants with K-H under the M&O Contract pursuant to the Act. Since CRADAs do not fall within the definition of "funding agreements" of Public Law 96-517, the patent policy set forth therein as applicable to small businesses and non-profit organizations does not apply. Hence, inventions made by any small business, non-profit organization or for-profit large business Participants to the CRADA are intended to be covered by this Class Waiver.

With respect to the advance Class Waiver to the class of CRADAs under the Act, it is expected that K-H will negotiate agreements that provide for a substantial cost sharing of the joint research effort by the Participants, thereby achieving a leveraging of the Government-funded portion of the joint work. In so doing, this advance Class Waiver is seen to be an extension of existing DOE patent waiver policy which recognizes that substantial cost sharing by Participants is an indication of commitment by the Participants to advance the technology and effect commercial utilization. Additionally, the work being performed under CRADAs will typically be driven by Participants' needs and will most likely be of near term commercial value hence, it is believed that the granting of the advance Class Waiver of inventions made by Participants under CRADAs will also make the benefits of the CRADA research widely available to the public in the shortest practicable time and promote the commercial utilization of the waived inventions.

Further, it is believed that technology transfer will be enhanced by both K-H and the CRADA Participant, as appropriate, being able to offer, for commercialization purposes, a waived invention with other related inventions and intellectual property.

Implementation of the advance Class Waiver is to be by execution of the AL approved

CRADA. Participants' cost of filing and maintaining any patent application(s) or patent(s) on their inventions will be at private expense.

It is expected that in negotiating the commercialization rights to the waived inventions (including background inventions owned by the parties, if any), K-H and the Participant will be guided by the respective equities of the parties, the small business status of the Participant, if applicable, and the overall objective of attempting to secure the most expeditious commercialization route for moving the technology from the research stage to the marketplace. Hence, it is recognized that the parties may conclude, in order to achieve the above objectives, that either K-H or the Participant should hold title to all of the inventions made under the CRADA. Where this occurs from good faith negotiation of the commercialization rights, a disposition of rights set forth in the CRADA of waived inventions other than each party owning its own inventions provided for in the advance Class waiver will not be a basis for disapproval by DOE of the submitted CRADA.

The scope of the Class Waiver to the identified inventions of K-H and Participants under CRADAs entered into under the Act does not include inventions which:

(1) Fall within DOE's weapons programs, which inventions principally relate to weapons or inherently disclose or suggest a weapons application where such disclosure or suggestion would be detrimental to national security;

(2) Relate to the Naval Nuclear Propulsion Program;

(3) Relate to the Uranium Enrichment (including Isotope Separation) Program;

(4) Are classified or sensitive under Section 148 of the Atomic Energy Act of 1954, as amended;

(5) Are included in international agreements or treaties;

(6) Are covered by existing or future Class Waivers granted to third parties by DOE, such as "Work for Others;" or

(7) Fall within any further exceptions which may, in the national interest, be unilaterally designated by the Secretary.

For inventions relating to Federal storage and disposal of civilian high-level nuclear waste and spent nuclear fuels, K-H's right to elect title is subject to the preservation in DOE of the right to require nonexclusive, nontransferable royalty-free licensing to any organization, such as a utility, that is contributing to the costs of activities relating to such storage and disposal.

This waiver of the Government's rights in inventions in the first case to K-H and in the

second case to Participant, as set forth herein is subject to the Government's retention of (1) a non-exclusive, non-transferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States the waived invention throughout the world, and (2) march-in rights comparable to those set out in 35 U.S.C. 203.

The grant of this Class Waiver should not result in adverse effects on competition or market concentration. DOE has the right to require periodic reports on the utilization or the efforts at obtaining utilization that are being made for the waived inventions. If K-H or Participant is not making reasonable efforts to utilize a waived invention, DOE can exercise its march-in rights and require licensing of the invention.

Accordingly, in view of the statutory objectives to be obtained and the factors to be considered under DOE's statutory waiver policy, the objectives of Public Law 101-189, and Executive Order 12591, all of which have been considered, it is submitted that the Class Waiver as set forth above will best serve the interest of the United States and the general public. It is therefore recommended that the waiver be granted.

James H. Chafin
Assistant Chief Counsel for
Intellectual Property and Technology Transfer
Albuquerque Operations Office

Based on the foregoing Statement of Considerations, it is determined that the interests of the United States and the general public will best be served by waiver of the United States and foreign patent rights as set forth herein and, therefore, the waiver is granted. This waiver shall not affect any waiver previously granted.

CONCURRENCE:

Victor H. Reis
Assistant Secretary for Defense
Programs

Date 4/1/98

APPROVED:

Paul A. Gottlieb
Assistant General Counsel for
Intellectual Property and Technology Transfer

Date 4-2-97

DOE F 1325.8
(8-89)
EFG (07-90)

United States Government **Department of Energy**

memorandum

DATE: MAR 2 4 1997

REPLY TO ATTN OF: DP-10

SUBJECT: Defense Programs Concurrence with a Class Waiver of the Government's U.S. and Foreign Patent Rights to the Kaiser-Hill Company in Inventions Made in the Performance of Cooperative Research and Development Agreements Entered into by the Rocky Flats Plant in the Course of or Under the Department of Energy's Management and Operating Contract No. DE-AC34-95RF00825 with the Kaiser-Hill Company, W(C)-95-011

TO: Victor H. Reis, DP-1

The Office of the Assistant General Counsel for Intellectual Property, GC-62, requested the Assistant Secretary for Defense Programs' (DP-1) concurrence with the above-mentioned Class Waiver, which is partially modeled after the Class Waiver W(C)-95-004 for EG&G Rocky Flats previously concurred in by DP-1.

The subject Class Waiver, provides the Kaiser-Hill Company (K-H) with the right to retain title to "Contractor CRADA inventions" -- the class of identified inventions which comprise subject inventions made by employees of K-H as set out in the M&O Contract in the performance of work under a CRADA that it enters into under the K-H M&O Contract pursuant to the National Competitiveness Technology Transfer Act of 1989.

The scope of this Class Waiver is further directed to an advance waiver to the participant of inventions made by employees of, or persons acting on behalf of participants under the class of CRADAs entered into by participants with K-H under the M&O Contract pursuant to the National Competitiveness Technology Transfer Act of 1989.

Inventions principally related to weapons or disclosing weapons, or those that are classified are excluded from the Class Waiver. Requests to acquire title to such inventions will continue to be handled by individual waiver petitions, which require Headquarters approval.

Waiver of the Government's rights in inventions to K-H and to the CRADA participant is subject to the Government's retention of (1) a non-exclusive, non-transferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the US, the waived invention throughout the world, and (2) march-in rights comparable to those set out in 35 USC 203.

The DP Office of Development and Technology Transfer (DP-17) and the Office of

*U.S.GOVERNMENT PRINTING OFFICE:1990-278-541

Research and Testing (DP-16) concur with the subject Class Waiver. Accordingly, I recommend that you concur with the attached Statement of Considerations

Robin Staffin
Deputy Assistant Secretary
for Research and Development
Defense Programs

Attachment

cc:
Diane Bird, DP-17
Robert DeWitt, DP-16
John Rooney, NN-40
Roger Heusser, NN-52

DOE F 1325.8
(8-89)
EFG (07-90)

United States Government **Department of Energy**

memorandum

DATE: MAR 21 1997

REPLY TO ATTN OF: DP-17

SUBJECT: Defense Programs Concurrence with a Class Waiver of the Government's U.S. and Foreign Patent Rights to the Kaiser-Hill Company in Inventions Made in the Performance of Cooperative Research and Development Agreements Entered into by the Rocky Flats Plant in the Course of or Under the Department of Energy's Management and Operating Contract No. DE-AC34-95RF00825 with the Kaiser-Hill Company, W(C)-95-011

TO: Robin Staffin, DP-10

The subject Class Waiver, which is partially modeled after the Class Waiver w(C)95-011 granted to previous Rocky Flats Plant M&O Contractor EG&G Rocky Flats, Inc., provides the Kaiser-Hill Company (K-H) with the right to retain title to "Contractor CRADA inventions" -- the class of identified inventions which comprise subject inventions made by employees of K-H as set out in the M&O Contract in the performance of work under a CRADA that it enters into under the K-H M&O Contract pursuant to the National Competitiveness Technology Transfer Act of 1989.

This waiver is consistent with the objectives and considerations of DOE's waiver regulations. It is believed that the waiver of the Government's rights to K-H in Contractor CRADA Inventions made in the performance of work under a CRADA will best promote the commercial utilization of such inventions and make the benefits of the cooperative research effort widely available to the public in the shortest practicable time. Further, waiver of the Government's rights in such inventions will enable DOE to take advantage of the technology transfer capabilities of K-H.

The scope of this Class Waiver is further directed to an advance waiver to the participant of inventions made by employees of, or persons acting on behalf of participants under the class of CRADAs entered into by participants with K-H under the M&O Contract pursuant to the National Competitiveness Technology Transfer Act of 1989.

Because CRADAs do not fall within the definition of "funding agreements" of Public Law 96-517, the patent policy set forth therein as applicable to small businesses and non-profit organizations does not apply. Hence, inventions made by any small business, non-profit organization or for-profit large business participants to the CRADA are intended to be covered by this Class Waiver.

*U.S.GOVERNMENT PRINTING OFFICE:1990-278-541

It is believed that technology transfer will be enhanced by both K-H and the CRADA participant, as appropriate, being able to offer, for commercialization purposes, a waived invention with other related inventions and intellectual property.

Inventions principally related to weapons or disclosing weapons, or those that are classified are excluded from the Class Waiver. Requests to acquire title to such inventions will continue to be handled by individual waiver petitions, which require Headquarters approval.

Waiver of the Government's rights in inventions to K-H and to the CRADA participant is subject to the Government's retention of (1) a non-exclusive, non-transferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the US, the waived invention throughout the world, and (2) march-in rights comparable to those set out in 35 USC 203.

The grant of this Class Waiver should not result in adverse effects on competition or market concentration. DOE has the right to acquire periodic reports on the utilization or the efforts at obtaining utilization that are being made for the waived inventions. If K-H or it's CRADA participant is not making reasonable efforts to utilize a waived invention, DOE can exercise its march-in rights and require licensing of the invention.

My office and the Office of Research and Testing, concur with the subject Class Waiver. Accordingly, I recommend that you concur with the attached Statement of Considerations

Diane Bird

Diane Bird
Acting Director
Office of Development and
Technology Transfer
Defense Programs

Attachment

cc:
Robert DeWitt, DP-16
John Rooney, NN-40
Roger Heusser, NN-52

STATEMENT OF CONSIDERATIONS

ADVANCE WAIVER OF THE U.S. GOVERNMENT'S DOMESTIC AND FOREIGN PATENT RIGHTS IN SUBJECT INVENTIONS ARISING UNDER INNOVATIVE TECHNOLOGY DEMONSTRATION PROJECTS AT TECHNOLOGY DEVELOPMENT-DESIGNATED TEST BED FACILITIES TO THE DEMONSTRATOR W(A)-95-011 AND TO THE LARGE BUSINESS LOWER TIER SUBCONTRACTORS THEREUNDER.

This waiver of the U.S. Government's domestic and foreign patent rights in Innovative Technology Demonstration Projects' subject inventions is intended to cover Innovative Environmental Technology Demonstrators and lower tier subcontractors, other than domestic small business and nonprofit organization Demonstrators and lower tier subcontractors covered by Public Law 96-517, demonstrating innovative environmental technology, under contract or other agreement with the Department of Energy (DOE), for environmental remediation at Technology Development-designated test bed facilities. This waiver of the U.S. Government's domestic and foreign patent rights is also intended to cover Demonstrators and their subcontractors, other than domestic small business and nonprofit organization Demonstrators and subcontractors covered by Public Law 96-517, demonstrating innovative environmental technology, under subcontract with the National Laboratories, for environmental remediation at Technology Development-designated test bed facilities. These designated test bed facilities are identified in the attached list (Attachment A). The list of designated test bed facilities may be enlarged or diminished by the Assistant General Counsel for Technology Transfer and Intellectual Property upon written request by the Deputy Assistant Secretary for Technology Development (or successor organization.)

This waiver does not apply to small business and non-profit organization Demonstrators or subcontractors covered by Public Law 96-517, as amended, regardless of tier of contracting. These small businesses and nonprofit organizations shall receive title to their subject inventions arising under Innovative Environmental Technology Demonstration Projects as required in Public Law 96-517, as amended. This waiver also does not grant any rights in inventions made by employees of the National Laboratories. This waiver does not apply to demonstrations at designated test bed facilities which are under the cognizance of programs other than EM-50.

This advance waiver represents a streamlined waiver process whereby individual Demonstrators and lower tier subcontractors at Technology Development-designated test bed facilities meeting the requirements described herein need not request individual waivers to gain the U.S. Government's domestic and foreign patent rights but may rely on this waiver to obtain such rights. In the event that an individual Demonstrator or subcontractor cannot satisfy the criteria for obtaining patent rights under this waiver, that Demonstrator or subcontractor may request a waiver in accordance with 41 CFR 9-9.109-6.

Background

In recognition of the nation's existing burden of sites contaminated with toxic materials and bearing major potential cleanup costs, the Office of Technology Development (OTD) is emphasizing an aggressive national program of applied research and development to focus, manage, and accelerate the development of new and existing technologies to meet environmental restoration and waste management demands. A keystone of this program is the development of better, faster, safer, and more cost-effective technologies to remediate hazardous and mixed waste sites and to manage waste. The OTD is acting to facilitate commercialization of innovative technologies, while leveraging scarce federal resources through cost sharing of at least twenty percent (20%) by the private sector. These cost shared projects will take the form of demonstration projects at designated test bed facilities. Such public-private partnerships provide participants with mutual benefits, while enabling them to share risks. The goal of the partnerships is to move innovative technologies and technology systems as products into domestic and global markets in a very efficient manner.

Effective remediation and waste management requires a problem focus for the development of innovative technologies, in which test bed demonstration plays a key role. Major focus areas of OTD remediation demonstrations, are:

- Contaminant Plume Containment and Remediation, focusing on uncontained hazardous and radioactive contaminants in soil and groundwater. Promising technologies include in situ remediation (including bioremediation) and directionally drilled treatment wells.

- Mixed Waste Characterization, Treatment, and Disposal, focusing on the management of low-level radioactively contaminated mixed waste. Versatile treatment approaches and nonthermal treatment options are among the technologies being pursued.

- Landfill Stabilization, focusing on landfills in need of remediation, containment, and treatment. Technologies are being developed to contain and provide in situ stabilization of buried waste; contain potential source terms in landfills that exhibit migration; and contain, remove, and treat buried waste and contaminated soils.

- Facility Deactivation, Decommissioning and Material Disposition, focusing on facilities and materials contaminated with radionuclides and hazardous materials. These problems are being addressed through demonstrations of technologies for concrete and metal decontamination; concrete, and metal structure dismantlement; and metal

recycling.

- Radioactive Tank Waste Remediation, focusing on large storage tanks which contain high-level mixed waste. The urgent risks of these tanks are being addressed through technologies for conducting tank structural integrity and waste analyses, retrieving radioactive materials from the tanks, and extracting radionuclides.

Test bed facilities are designated for crosscutting technologies that support the major focus areas. The crosscutting technologies managed by OTD include:

- Characterization, Monitoring, and Sensor Technologies that address location and characterization of wastes prior to treatment; monitoring of waste retrieval, remediation, treatment, and evaluation processes; and site closure and compliance monitoring;

- Robotics systems that focus on reducing secondary waste generation by removing workers from hazardous waste areas, reducing worker exposure and increasing worker safety through remote operation of equipment, and increasing productivity through automation and "intelligent machines", and;

- Waste Treatment Technologies, such as those to more efficiently separate radioactive and hazardous components from hazardous waste, with a goal of minimizing the volume of waste sent to repositories.

Advance Waiver of the U.S. Government's Domestic and Foreign Patent Rights in Demonstrator's and Lower Tier Subcontractor's Subject Inventions

Section 152 of the Atomic Energy Act of 1954, as amended (42 USC 2182) and Section 9 of the Federal Non-nuclear Energy Research and Development Act of 1974 (42 USC 5908) generally require that the Government take title to subject inventions, unless a waiver is granted. Under the authority of 42 USC 2182 and 5908 and implementing regulations, it is a purpose of this advance waiver to provide a waiver of the U.S. Government's domestic and foreign patent rights in subject inventions, arising under Innovative Environmental Technology Demonstration Project contracts with the DOE to the Demonstrator.

It is a further purpose of this advance waiver to provide a waiver of the U.S. Government's domestic and foreign patent rights in subject inventions of the Demonstrator, arising under Innovative Environmental Technology Demonstration Project subcontracts with a(the) National Laboratory(ies), to the Demonstrator.

This waiver of the Government's rights in inventions as set forth

herein is subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, as set out in 35 U.S.C. 202-204. This waiver of the U.S. Government's patent rights in inventions as set forth herein is also conditioned on the Demonstrator accepting the attached patent clause, data clauses in accordance with Acquisition Letter 87-5, and the attached background patent and data clauses. The background patent and data clauses require the Demonstrator to license the Government for purposes of site remediation and for commercialization purposes in the event the Demonstrator fails to commercialize a subject invention. Further, the Demonstrator must agree to the attached U.S. Competitiveness clause. After consultation with the Assistant General Counsel for Technology Transfer and Intellectual Property and for good cause, the above provisions may be modified by DOE Patent Counsel. Lastly, this waiver is conditioned on the Demonstrator providing at least a twenty percent (20%) cost share in the Innovative Environmental Technology Demonstration Project, as approved by the DOE contracting officer of the project.

With respect to lower tier subcontracts, it is a further purpose of this advance waiver to provide a waiver of the U.S. Government's domestic and foreign patent rights in subject inventions of the lower tier subcontractors, arising either under a subcontract with the DOE or under a sub-subcontract with a(the) National Laboratory(ies), to the lower tier subcontractors. This waiver of the Government's rights as set forth herein is conditioned on the lower tier subcontractor accepting the same terms and conditions under which the Demonstrator will be granted the advance waiver. These terms include the attached patent clause, data clauses in accordance with Acquisition Letter 87-5, the attached background patent and data clauses, the conditions set out in 35 U.S.C. 202-204, the attached U.S. Competitiveness provisions and at least a 20% cost share by the lower tier subcontractor. The background patent and data clauses require the lower tier subcontractor to license the Government for purposes of site remediation and for commercialization purposes in the event the lower tier subcontractor fails to commercialize a subject invention. After consultation with the Assistant General Counsel for Technology Transfer and Intellectual Property and for good cause, the above provisions may be modified by DOE Patent Counsel. In recognition of the lower tier subcontractors' right to request a waiver of patent rights under their own subcontract, this waiver will apply only to such lower tier subcontractors who provide to the DOE, in writing, acknowledgement of their waiver rights and agreement to the terms of their subcontract. Again, this waiver shall not impact the rights of small business and non-profit organizations subject to Public Law 96-517, as amended, at any tier, nor shall it grant any rights in inventions made by employees of the National Laboratories.

Conclusions/Recommendations

It is believed that granting the advance waiver of the scope described herein would provide Demonstrators, other than small business and nonprofit organization Demonstrators covered by Public Law 96-517, and lower tier subcontractors, other than small business and nonprofit organization subcontractors, with the necessary incentive to invest their resources in the commercialization of the results of the Innovative Environmental Technology Demonstration Program in the fashion which will make the Demonstration's benefits available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 41 CFR 9-9.109-6, all of which have been considered, it is recommended that the requested waiver by granted.

This waiver will be effectuated by the inclusion of the conditions in 35 U.S.C. 202-204, as well as, the attached patent clause, data clauses in accordance with Acquisition Letter 87-5, the attached background patent and data clauses and the attached U.S. Competitiveness clauses in the contract with DOE, or in the subcontract with a(the) National Laboratory(ies), for Innovative Environmental Technology Demonstration Projects at a Technology Development-designated test bed facility. Any deviation from these clauses shall be approved by the Assistant General Counsel for Technology Transfer and Intellectual Property.

Accordingly, in view of the statutory objectives of DOE waiver policy, and in view of the factors to be considered under DOE's statutory patent waiver policy, all of which have been considered, it is recommended that this waiver as set forth above will best serve the interest of the United States and the general public. It is therefore recommended that the waiver be granted.

Sue Hagarman Palk

Sue Hagarman Palk
Office of the General Counsel for
Technology Transfer and
Intellectual Property

Based on the foregoing Statement of Considerations, it is determined that the interest of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification that substantially alters the purpose or scope of the demonstrations described herein, or reduces the cost share amount required of the Demonstrator as stated herein.

CONCURRENCE:

_____

Clyde W. Frank
Deputy Assistant Secretary
for Technology Development

DATE: _____

APPROVAL:

Paul A. Gottlieb
Assistant General Counsel for
Technology Transfer and
Intellectual Property

DATE: 4/13/95 SAP

Based on the foregoing Statement of Considerations, it is determined that the interest of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification that substantially alters the purpose or scope of the demonstrations described herein, or reduces the cost share amount required of the Demonstrator as stated herein.

CONCURRENCE:

Clyde W. Frank
Deputy Assistant Secretary
for Technology Development

DATE: 9/13/95

APPROVAL:

Paul A. Gottlieb
Assistant General Counsel for
Technology Transfer and
Intellectual Property

DATE:

REMEDIATION TECHNOLOGY TEST BEDS

Item #	FOCUS AREA or PROGRAM	FACILITY	ADDRESS	FIELD CONTACT	PHONE/FAX	DESCRIPTION
1	Plumes	Resource Recovery Testbed	WETO P.O. Box 4078 Butte, MT 59702	Creighton Barry MSE	Ph: 406-494-7268 Fax: 406-494-7230	Test and evaluate resource recovery and water remediation
2	Plumes	Mine Waste Technology Program Testbed	WETO P.O. Box 4078 Butte, MT 59702	Creighton Barry MSE	Ph: 406-494-7268 Fax: 406-494-7230	Test bench and pilot-scale mine waste site cleanup technologies
3	Plumes	SNL Mixed Waste Landfill	Sandia National Laboratory	George Allen	Ph: 505-844-9769	Facility consists of Chemical Waste and Mixed Waste Landfills and Unlined Chromic Acid Pit.
4	Plumes	Dover AFB	DuPont Chemicals 300 BelleVue Parkway, Wilmington, DE 19809	Dave Ellis	Ph: 302-792-8830 Fax: 302-792-8995	In situ bioremediation demonstration
5	Plumes	McClelland AFB				Installation and remediation techniques using horizontal wells
6	Plumes	Tinker AFB				Soil fracturing techniques to improve reagent delivery/contaminant removal
7	Plumes	Savannah River		J. Wright, DOE; Tim Jarosch (off-gas); Brian Looney (DNAPLs)		Treatment of metals in groundwater; detection/ removal/destruction of DNAPLs from ground water
8	Plumes	Idaho				Demonstrate mixed contaminant remediation in ground water using vertical recirculation wells with various downhole treatment modules.
9	Plumes	Hanford		Steve Slate, PNL	Ph: 509-376-3903	Metals and VOC treatment technologies, innovative drilling methods, contaminant sensors, off-gas treatment, in situ bioremediation
10	Plumes	Portsmouth		Doug Davenport, MMES/Portsmouth Bob Siegrist, ORNL	Ph: 614-897-3261 Ph: 303-273-3490	A series of lined soil cells in low-permeability soils for testing various in situ treatment and injection methods.
11	Plumes	Oak Ridge/K-25		Randy Snipes, HAZWRAP		Electrokinetic removal of Uranium from clayey soils
12	Plumes	Six-Phase Soil Heating Test Site	Rocky Flats Environmental Technology Site	Norma Castaneda Scott Grace (OU-2 mgr)	Ph: 303-966-4226 Fax: 303-966-4871 Ph: 303-966-7199	VOC and DNAPL treatment in the soil zone.

REMEDIATION TECHNOLOGY TEST BEDS (continued)

Item #	FOCUS AREA or PROGRAM	FACILITY	ADDRESS	FIELD CONTACT	PHONE/FAX	DESCRIPTION
13	Plumes	Fernald		Paul Pettit	Ph: 513-870-0632	Demonstration of horizontal barriers beneath waste sites; phytoremediation to remove rads and heavy metals from soils.
14	Plumes	Chico Municipal Airport, Chico, CA	L-206, LLNL P.O. Box 808 Livermore, CA 94550	Richard Knapp (Principal Investigator)	Ph: 510-423-3328	The site has been developed to host a demonstration of the In Situ Microbial Filter
15	Plumes	Aber Road Site, Cincinnati, OH		Larry Murdock, EPA		Clean Test Facility managed/supported by EPA & U. of Cincinnati.
16	Plumes	Paducah, KY				Demonstrate technologies to move metals and organics from clay soils into treatment zones and to remove metals and degrade VOCs from ground water.
17	Plumes	Brookhaven National Laboratory				Demonstration of bioremediation in deep aquifers
18	Plumes	Chicago				Bioremediation
19	Landfill	Arid Testbed	Idaho	Kathleen E. Hain, DOE		
20	Landfill	Non-Arid Testbed	Savannah River	J. Brown, DOE		
21	Facility Transitioning	Dismantlement and Material Recycle Testbed	Idaho			
22	Facility Transitioning	Concrete Decontamination Testbed	Oak Ridge			
23	Facility Transitioning	Concrete and Metal Decontamination Testbed	Fernald			
24	Mixed Waste	Thermal Programs Testbed	WETO P.O. Box 4078 Butte, MT 59702	Jeff Ruffner, MSE	Ph: 406-494-7412 Fax: 406-494-7230	Evaluate use of plasma technology for thermal treatment of hazardous waste.
25	Mixed Waste	Envirocare	Toole, Utah			Low Level Mixed Waste
26	Tanks	Ion Exchange Skid Unit	Savannah River Technology Center	Jane Bibler	Ph: 803-725-5276 Fax:	Allows full scale testing of ion-exhange resins.
27	Tanks	Hot Cell	Oak Ridge National Laboratory Oak Ridge, TN	Rodney Hunt	Ph: 615-574-5481 Fax: 615-574-7229	Hot Cell: allows remote, small-scale testing of radionuclide and chemical separation technologies.

REMEDIATION TECHNOLOGY TEST BEDS *(continued)*

Item #	FOCUS AREA or PROGRAM	FACILITY	ADDRESS	FIELD CONTACT	PHONE/FAX	DESCRIPTION
28	Tanks	Waste Dislodging & Conveyance Test Bed	337 Building, PNL P.O. Box 999 Richland, WA 99352	DOE/RL: Dennis Brown PNL: Mike Rinker	Ph: 509-372-4030 Fax: 509-372-4037	Integrated robotic gantry testing and evaluation facility for hydraulic mobilization of tank wastes.
29	Tanks	Light Duty Utility Arm Test Bed	FMEF Westinghouse P.O. Box 1970 Richland, WA 99352	DOE/RL: Dennis Brown WHC: Bettey Carterett	Ph: 509-372-4030 Fax: 509-372-4037	Testing and evaluation facility for a robotic platform for inserting end effectors into tanks.
30	Tanks	Hot Cell Analytical Test Bed	Westinghouse P.O. Box 1970 Richland, WA 9935	DOE/RL: Dennis Brown WHC: Fred Reich	Ph: 509-372-4030 Fax: 509-372-4037	Full-scale hot cell mock-up for remote testing and evaluation of advanced analytical instrumentation for waste characterization.
31	Tanks	Medium Pressure Waste Dislodging Test Bed	Univ. of Missouri -Rolla Rolla, Missouri	DOE/RL: Dennis Brown UMR: Prof. Dave Summers	Ph: 509-372-4030 Fax: 509-372-4037	Evaluation of water jet waste dislodging for Underground Storage Tanks at INEL and ORNL.
32	Characterization	Geophysical Performance Evaluation Range	DOE-Grand Junction Proj. Ofc. 2597 B 3/4 Road Grand Junction, CO 81503	John Dickerson, RUST Geotech	Ph: 303-248-6293	Tests capabilities of geophysical instruments in locating buried objects and mapping subsurface geological features.
33	Characterization	Cold Test Pit	INEL 2525 Fremont Street Idaho Falls, ID 83415	Bob Heard	Ph: 208-526-6802	Cells filled with objects that were stacked or dumped in a known configuration and then buried.
34	Robotics	Robotics Technology Assessment Facility	ORNL P.O. Box 2008, Bldg 7601 Oak Ridge, TN 37831	Bill Hamel	Ph: 615-574-5691 Fax: 615-576-2081	Test and evaluation facility for robotics decontamination & dismantlement technologies
35	Robotics	Tank Waste Retrieval Test Bed	336 Building, PNL P.O. Box 999 Richland, WA 9935	DOE/RL: Dennis Brown PNL: Mark Evans	Ph: 509-372-4030 Fax: 509-372-4037	Prototype tank waste retrieval system, including mock up of a million-gallon tank.
36	Pollution Prevention	Spray Casting Programs Testbed	WETO P.O. Box 4078 Butte, MT 59702	Allan Miller, MSE	Ph: 406-494-7319 Fax: 406-494-7230	Chromium electroplating of aviation parts; near-net shape fabrication of special nuclear materials

U. S. Competitiveness Provision

A. DEFINITIONS

1. Technology - Products, processes, services and improvements thereof which are covered by intellectual property, as well as any Protected Data, developed under the Test Bed Demonstration Project under the cognizance of the Office of Technology Demonstration or successor organization. An environmental technology is a technology that reduces human and ecological risks, enhances cost effectiveness, improves process efficiency, and creates products and processes that are environmentally beneficial or benign. Categories of environmental technologies include those which avoid problems, control existing problems, remediate or restore past problems, and monitor and assess the state of the environment.

2. Foreign Firm or Institution - A firm or institution organized or existing under the laws of a country other than the United States, its territories, or possessions. The term includes, for purposes of this Agreement, any agency or instrumentality of a foreign government; and firms, institutions or business organizations which are owned or substantially controlled by foreign governments, firms, institutions, or individuals.

3. Transfer - Includes a sale of the company, and sales or licensing of Technology.

   Transfers do not include:

   (a) sales of products, components or services;

   (b) licenses of software or documentation related to sales of products or components;

   (c) transfers of Technology to foreign Affiliates (a direct or indirect majority-owned subsidiary of a Demonstrator or lower tier subcontractor, a direct or indirect parent that directly or indirectly owns a majority of the shares of a Demonstrator or lower tier subcontractor, or a direct or indirect majority-owned subsidiary of a parent of a Demonstrator or lower tier subcontractor) of a Demonstrator or lower tier subcontractor for use outside of the United States and without re-export to the United States.

B. REQUIREMENTS

The Demonstrators or lower tier subcontractor agree that a purpose of the waiver of certain Government rights in any Technology arising under the Test Bed Demonstration Project is to

provide substantial benefit to the U.S. economy.

In exchange for the benefits received under this waiver, the Demonstrators or lower tier subcontractors agree to the following:

A. Products and improvements thereof embodying Technology shall be substantially manufactured in the United States except where the product is to be used to clean up a foreign site and that foreign country requires the product be manufactured in that same country. Products embodying Technology and manufactured outside the United States under the above circumstances may not be imported into the United States;

B. Processes, services, and improvements thereof embodying Technology shall be incorporated into the Demonstrator's or lower tier subcontractor's manufacturing facilities or otherwise implemented in the United States either prior to or simultaneously with implementation outside the United States. Such processes, services, and improvements, when implemented outside the United States, shall not result in reduction of the use of the same processes, services, or improvements in the United States; and,

C. In the event that it is not feasible to meet the requirements of A. and B., an alternate clause for providing net benefit to the United State's economy may be negotiated with the local Department of Energy Patent Counsel, subject to the approval of the Deputy Assistant Secretary of Technology Development, and attached hereto.

C. RESTRICTIONS ON SALE OR TRANSFER OF TECHNOLOGY TO FOREIGN FIRMS OR INSTITUTIONS

The Demonstrator or lower tier subcontractor shall provide written notice to the Deputy Assistant Secretary of Technology Development of any proposed Transfer of Technology to Foreign Firms or Institutions at least sixty (60) calendar days prior to the proposed date of Transfer. If the Deputy Assistant Secretary of Technology Development determines that the Transfer may have adverse consequences to national interests of the United States, the Demonstrator or lower tier subcontractor and the Deputy Assistant Secretary of Technology Development shall jointly endeavor to find alternatives to the proposed Transfer which obviate or mitigate potential adverse consequences of the Transfer but which provide substantially equivalent benefits to the Demonstrator or lower tier subcontractor.

REQUEST THAT THE CHICAGO PILE NUCLEAR REACTOR SITE (CP-5) BE DESIGNATED A TEST BED SITE AND INCLUDED UNDER THE ADVANCE WAIVER OF THE U.S. GOVERNMENT'S RIGHTS IN SUBJECT INVENTIONS ARISING UNDER INNOVATIVE TECHNOLOGY DEVELOPMENT-DESIGNATED TEST BED FACILITIES W(A)-95-011.

The Office of Science and Technology (OST) requests that CP-5, at Argonne National Laboratory, be designated a test bed site. The OST is facilitating the commercialization of innovative technologies, while leveraging scarce financial resources through cost sharing by the private sector on projects to remediate sites contaminated with toxic materials. Such public private partnerships provide participants with mutual benefits, while enabling them to share risks. The goal of the partnerships is to move innovative technologies and technology systems as products into domestic and global markets in a very efficient manner. These cost-shared projects or partnerships will take the form of demonstration projects at the designated test bed facilities.

It was determined that a fast, and efficient method was needed to commercialize the new technologies and move them into the market place. A class wavier of the Government's foreign and U.S. rights for inventions developed by contractors and their subcontractors at the test bed sites was issued in April of 1995 to facilitate such commercialization. It included a number of remediation sites as being covered by the class waiver. In addition, it anticipated the need for sites not named to have the same type of waiver to expedite the commercialization of new technologies. The waiver allows for the inclusion of new sites that meet at least one of the focus areas: Plume Containment and Remediation; Mixed Waste Characterization, Treatment, and Disposal; Landfill Stabilization; Facility Deactivation, Decommissioning and Material Disposition; or Radioactive Tank Waste Remediation. Such inclusion also would require that the contractors and their subcontractors agree to at least a twenty percent cost share. The waiver would then be subject to march-in and preference for U.S. industry provisions, as well as the U.S. Government license, as set out in 35 USC 202-204. It is further conditioned upon the participants accepting appropriate Patent and Data clauses. Moreover, the participant must agree to a U.S. Competitiveness clause.

CP-5 at Argonne National Laboratory is the fifth research nuclear reactor built by the University of Chicago which was the beginnings of nuclear research in the United States. It is scheduled for facility decontamination and decommissioning activities. Further, it has been identified as a test bed for the demonstration of new technologies at the site. These new technologies have been spotlighted as having potential applicability at private reactor sites. For these reasons we believe that the CP-5 site meets the focus area criteria as contemplated by the class waiver.

The participants consist of service providers, who are responsible for the administrative operations of the project, and technical leads, who will be assigned tasks according to their technical expertise. While both the service providers and the technical leads are covered by the appropriate patent and data terms and conditions in the agreement, the waiver only applies to the technical leads who will meet the conditions of the waiver and have an opportunity to take title in their employees inventions. In addition, the technical lead participants have agreed to a thirty

percent cost share of the cost of their respective tasks under the agreement, and the waiver would be subject to march-in and U.S. preference provisions, a Government license, and the U.S. Competitiveness clause. More importantly, the cost share must be certified by the DOE Contracting Officer prior to the participants having rights to their inventions under the waiver.

The participants understand that this represents a streamlined waiver process and that if they or their subcontractors are unable to satisfy the criteria for obtaining patent rights under the class waiver, that participant or subcontractor may request a waiver in accordance with 41 CFR 9-9.109-6.

It is also our understanding that this waiver will not apply to small business and non-profit organization demonstrators or subcontractors covered by Public Law 96-517, as amended, regardless of tier of contracting. These small businesses and nonprofit organizations shall receive title to their subject inventions arising under Innovative Environmental Technology Demonstration Projects as required in Public Law 96-517, as amended. In addition, this waiver will not grant any rights in inventions made by employees of the National Laboratories.

In view of the foregoing, I recommend that CP-5 be designated a test bed site, and that it be included as a site approved under the Class Waiver.

Recommended:

Clyde W. Frank, Deputy Assistant Secretary for Science and Technology, HQ
EM-50 5B-014/FORS

Date: 4/11/96

Approved:

Paul A. Gottlieb, Assistant General Counsel for Technology Transfer and Intellectual Property, HQ
GC-62 6F-067/FORS

Date: 4-11-96